

**Supplementary 4.** Re-estimated regression coefficients in the external validation cohort

Univariable hazard ratios for overall survival (OS) were calculated using Cox regression. Assumption of proportionality hazards for each predictor was tested including time-dependent covariate [15]. The partition of the time axis [15] was studied using Schoenfeld residual plots in OS. Univariable re-estimated regression coefficient for cause-specific survival (CSS) and disease-free survival (DFS) were estimated using competing risks models [16,17]: 1) modeling the effect of covariates on the cause-specific hazard of the outcome (cause-specific hazard model) and 2) modeling the effect of covariates on the cumulative incidence function (subdistribution hazard model). Assumption of proportionality hazards for each predictor was tested including time-dependent covariate. The partition of the time axis evaluated were 2.3 and 4 years.

**Table 20.** Univariable re-estimated regression coefficient in the external validation cohort

	OS	CSS	CSS	DFS	DFS
	HR 95% CI	Subdistribution hazard model	Cause-specific hazard model	Subdistribution hazard model	Cause-specific hazard Model
<b>Age (yr)</b>	1.00 (0.99; 1.02)	0.99 (0.98; 1.01)	0.99 (0.98; 1.01)	1.00 (0.98; 1.03)	0.99 (0.97; 1.00)
<b>FIGO stage:</b>					
<b>IB1–IB2–IIA–IIB</b>	1	1	1	1	1
<b>IIIA–IIIB–IVA</b>	2.56 (1.65; 3.97)	2.82 (1.76; 4.52)	2.84 (1.76; 4.57)	1.47 (0.74; 2.91) <sup>‡</sup>	2.98 (1.90; 4.68) <sup>*</sup>
<b>Histological type</b>					
<b>Squamous carcinoma</b>	1	1	1	1	1
<b>Adenocarcinoma plus adenoescumous</b>	0.44 (0.19; 1.01) <sup>*</sup>	0.68 (0.37; 1.23) <sup>†</sup>	0.38 (0.15; 0.94) <sup>*</sup>	0.45 (0.14; 1.44) <sup>‡</sup>	0.84 (0.50; 1.44)
<b>ECOG</b>					
<b>0–1</b>	1	1	1	1	1
<b>2–3</b>	3.65 (2.18–6.12) <sup>*</sup>	3.16 (1.94; 5.18)	3.22 (2.00; 5.20)	2.51 (1.27; 4.98)	3.18 (2.08; 4.78)

<b>SCC-Ag</b>					
≤5	1	1	1	1	1
>5	2.65 (1.56–4.49)*	2.24 (1.40; 3.59)‡	3.11 (1.78; 5.44)*	1.53 (0.83; 2.84)	1.86 (1.25; 2.77)
<b>Tumor size</b>	1.02 (1.01–1.04)*	1.02 (1.01; 1.04)	1.02 (1.01; 1.04)	1.02 (0.99; 1.04)	1.02 (1.01; 1.04)‡
<b>Parametrium invasion</b>					
Negative	1	1	1	1	1
Positive	6.09 (1.91; 19.39)*	2.76 (1.29; 5.91)‡	8.83 (2.16; 36.13)*	1.18 (0.53; 2.66)	2.32 (1.27; 4.24)
<b>Hidronephrosis</b>					
Negative	1	1	1	1	1
Positive	2.54 (1.62; 3.98)	2.72 (1.70; 4.37)	2.76 (1.73; 4.39)	0.81 (0.33; 1.96)	2.36 (1.53; 3.62)
<b>Bladder/recto invasion</b>					
Negative	1	1	1	1	1
Positive	1.64 (0.82; 3.26)	1.93 (1.00; 3.73)	1.92 (0.96; 3.83)	1.52 (0.54; 4.28)	2.27 (1.25; 4.16)
<b>Lymph node</b>					
Negative	1	1	1	1	1
Pelvic	1.28 (0.77; 2.10)	1.27 (0.75; 2.16)	1.29 (0.76; 2.17)	1.73 (0.86; 3.48)	1.62 (1.04; 2.51)
Para-aortic (with or without pelvic)	2.18 (1.31; 3.61)	2.17 (1.29; 3.65)	2.19 (1.29; 3.74)	1.96 (0.87; 4.40)	1.94 (1.17; 3.23)
<b>Race</b>					
White	1	1	1	1	1
Hispanic	0.30 (0.12; 0.74)	0.35 (0.14; 0.87)	0.34 (0.14; 0.85)	0.98 (0.41; 2.34)	0.61 (0.32; 1.14)
Black plus Asian plus others	2.06 (0.99; 4.28)	2.28 (1.17; 4.44)	2.26 (1.08; 4.71)	1.58 (0.52; 4.86)	2.03 (1.02; 4.04)

\*The partition of time axis was 2.3 years; †Nonproportional data; ‡The partition of time axis was 4 years.